

ABSTRACT

The present invention provides for a optical head device having a beam-guiding optical device to bring beams of different wavelengths which are emitted by separate light sources together onto the same optical axis or to guide the beams onto a common photo receiving device. The beam-guiding optical device includes an incident plane and an exit plane and the incident plane and the exit plane are back to back. One of the incident plane and the exit plane has a stair-like surface wherein a step height between neighboring treads in the stair-like surface is set to cause a phase difference of n wavelength to one of the beams passing through the neighboring treads and n is equal to 1, 2, 3

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